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A MECHANISM FOR SYNCHRONOUS INTERPROCESS
COMMUNICATION OVER TRANSPARENT EXTERNAL MONITORS

ABSTRACT

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A method and system for performing interprocess communications (IPCs). The method comprises the steps of receiving IPC requests, where each of the IPC requests identifies a source and a destination; building IPCs in response to the request: transmitting the IPCs from the sources to the destinations; and intercepting and examining selected ones of the IPCs. The method comprises the further step of controlling the synchrony of the IPCs so that each IPC appears to its source and destination to be implemented according to the same semantics regardless of whether the IPC is intercepted and examined. With the preferred embodiment of this invention, the system monitors are considered as an extension of the system kernel (although they may be linked into the kernel and run in kernel mode as well), so the source and destination are treated as if the kernel is still processing the IPC. Thus, the desired semantics of communication can be implemented in the monitors.